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WHY **SECURITY MATTERS** AGAIN 26

Our **2009 Global Information Security** survey underscores the rising risks from social media and cloud computing. The good news: more support from business leaders. **BY BILL BRENNER**

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COVER STORY Our seventh-annual Global Information Security survey finds IT leaders struggling to defend against new threats from social networking and cloud computing, but with renewed support from business leaders.

BY BILL BRENNER



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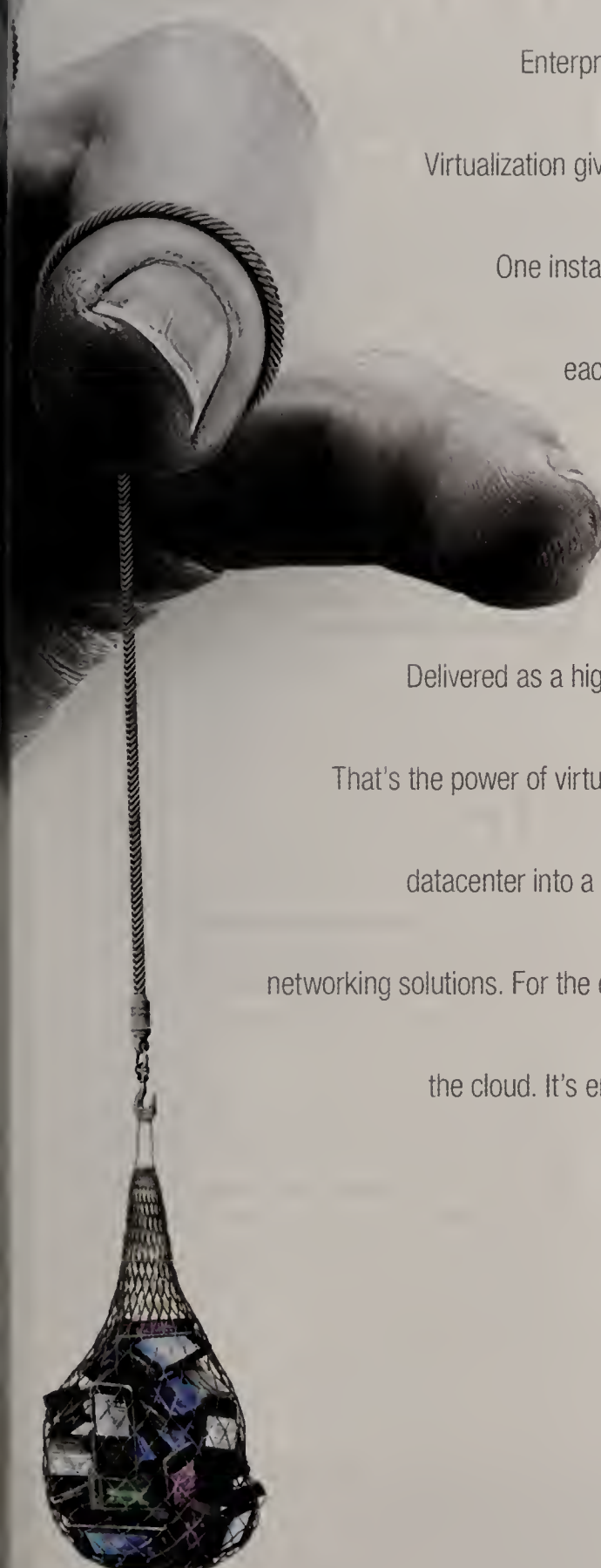
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FROM THE
EDITOR IN CHIEF

start

CHATTER

Storm Warnings

The dark side of cyberspace tends to sneak up on you. One minute you're clicking away on a trusted website. The next minute, you're staring at a flashing security warning, commanding the download of "virus protection software" that later turns out to be malware masquerading as an ad.

The problem for CIOs is that some cybercriminally inclined idiot is always thinking up something next. And they're targeting the weakest link of all: your end-users.

Speaking on behalf of average users everywhere, let me remind you that we don't know jack. When it comes to secure computing practices, most of us are worse than sheep (who at least can't do their companies much harm online due to a lack of opposable thumbs).

Online security risks are, of course, a hardy perennial in the garden of CIO concerns. So why should you be more attentive to them now than, say, a year or two ago?

You'll find some definitive answers to that in our cover story ("Why Security Matters Again," Page 26), which reports the results of this year's Global Information Security survey. We conducted this survey jointly with PricewaterhouseCoopers and CSO magazine, gathering responses from 7,300 business and technology executives around the world.

One surprise was that even in the grip of a global recession, companies did not pare down security spending, although they are clearly outsourcing less and pulling certain protections back in-house. Another welcome surprise was the resurgence of CSO titles and IT security chief jobs. An overwhelming 85 percent of our survey-takers reported having a top security exec in position now—way up from last year's 56 percent.

What wasn't so surprising are the underlying reasons why security matters again: social networking and cloud computing, both set against a regulatory backdrop of increasing compliance mandates.

The perils that social networking sites pose to intellectual property are already much-discussed in the press and around the C-suite. But user education and training is lacking at most companies, our survey shows.

Top that concern off with the accelerating move toward outsourcing key IT assets to software-as-a-service vendors and cloud services providers, most of whom are feeling their way through a wildly uncertain market.

If you haven't given security much attention lately, it's time to shine a little light on the subject. Don't let the darkness catch you unawares.

Maryfran Johnson, Editor in Chief, CIO Magazine & Events
mfjohnson@cio.com

ERP Travails

Lately, CIO.com Senior Editor Thomas Wailgum has been looking at the ERP landscape. Not surprisingly, it's complicated. To wit: his perspective on a Fox News story about the progress and scope of **the United Nations's \$337 million SAP ERP implementation.**

George Russell of Fox News was quick to criticize a U.N. document detailing the progress and scope of the project, castigating the U.N. "bureaucrats" for their "sweeping generalities" when they described the project's alleged efficiencies and cost savings.

Wailgum takes a closer look at the document, **honing in on the change management challenges.** Quips one commenter: "I can't think of a more entertaining spectacle to watch: the unyielding international behemoth versus the unyielding international behemoth. ...Anyone got the popcorn ready?"

advice.cio.com/node/8637

If you're not wrestling with a new ERP installation, Wailgum writes, maybe you're stuck with **a mature ERP system implemented by your predecessor.** Inherited systems come with their own set of baggage, including four common challenges. www.cio.com/article/502280

Meanwhile, according to Aberdeen Group, Tier 1 and Tier 2 ERP providers have succeeded in wooing the midmarket. And now those **ERP customers are opting to ignore new suite releases and upgrades.** Standardization is essential, Wailgum says, if companies want to gain operational efficiencies. www.cio.com/article/501907

Oprah vs. Supply Chains

When Oprah Winfrey endorses a company's product, the marketing team whoops and the supply chain team grimaces. If you're going to benefit from the "Oprah Effect," **you'd better be ready to deliver the goods.** An Oprah appearance ►►►



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FROM THE
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Doing Less With Less

Remember the 1976 movie *Network*, in which actor Howard Beale goes on an on-air rampage encouraging viewers to lean out their windows and scream, "I am mad as hell and I am not going to take it anymore!"?

Beale's rant came to mind during a recent series of dinners I attended for CIOs around the country, hosted by enterprise software vendor CA.

The focus of the dinners was a concept called "enterprise lean systems"—a phrase that was new to me. Analysts best sum up lean IT in these four words: maximize value, lower costs.

As I gave my opening remarks at each dinner, I promised my guests that we were collectively going to drive a nail into the do-more-with-less coffin. And at dinner after dinner, from Denver to Philadelphia to Washington, D.C., guests vociferously agreed with what one CIO referred to as the "moronic" marketing phrase of doing more with less.

One key lesson CIOs are learning during this recession is that the three most important words in the lexicon of successful CIOs are: "business, business, business." Smart CIOs know that budgets for 2010 will not spring back to levels seen prior to 2007 for several more years. They also know that the business continues to demand more solutions every day.

At one dinner, a CIO said his mantra for 2010 was "do less with less." I asked him what he meant by that. He said CIOs needed to do a much better job at prioritizing projects and doing fewer of them with less money in the budget for next year.

Makes sense.

Are you mad as hell and not going to take the do-more-with-less marching orders any longer? Visit your favorite search engine and discover all you can about enterprise lean systems and lean IT. The demand for tech solutions will continue to soar next year. Your budgets will not. But I guarantee you that you can find lots of fat that can be trimmed to fund the projects that count.

Enterprise lean systems can help you do that.

Good luck in doing less with less.

Gary J. Beach

Gary Beach, Publisher Emeritus
gbeach@cio.com

►►► **Chatter** Continued from Page 6

in downtown Chicago last month accounted for about 10 percent more shopper traffic.
www.cio.com/article/501830

Put Down That Phone

The National Transportation Safety Board has **barred its employees from talking or texting while driving**—even if they employ hands-free products like Bluetooth headsets and speakerphones. CIO.com Staff Writer Al Sacco is understandably skeptical. "How will this ban be enforced? How would an NTSB manager know if Mr. Suit decided to pick up the call from his wife?"
www.cio.com/article/501805

A New Way to Pay?

Offshore outsourcers are coming up with new pricing methods in response to more demanding customers. Provider MindTree is publicizing its **hybrid pricing model**, which it says combines the best of both time-and-materials and fixed-price models. **Is this IT service pricing innovation or slick marketing?** CIO.com's Stephanie Overby weighs in.
www.cio.com/article/502196

Seeing Through the Cloud

Don't believe that cloud services are a "magic bullet," says Forrester Research analyst Paul Roehrig. He shares five tips for IT leaders investigating cloud service providers and suggests how to get started **separating the features and services that are nice to have from what you really need.**

www.cio.com/article/502114

Separated at Birth

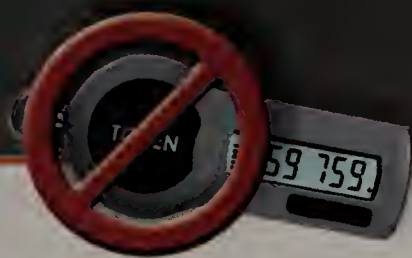
Tech titans are often one-of-a-kind characters, but **some Silicon Valley kingpins have virtual twins** lurking in Hollywood and Washington, D.C. Who might be Salesforce.com Marc Benioff's or former HP CEO Carly Fiorina's doppelganger? Take a look.
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NEWS

Apple Probes Battery Woes

Continued complaints about fast-draining iPhone batteries have prompted Apple to ask some users to install power-logging software to help diagnose the problem, according to messages on the company's support forum.

Apple technical support has also used a questionnaire in its discussions with users in an attempt to figure out the cause of rapid battery drain. Questions cover topics including Wi-Fi, Bluetooth and e-mail use. *Computerworld*

Twitter Cofounder Says No Ads This Year

Twitter has no plans to put ads on the popular microblogging site this year, cofounder Biz Stone said while attending a conference last month.

Stone, who said Twitter is "pretty good right now" with regards to funding, added the company's immediate focus was on building out features ranging from improved search to paid commercial accounts. *Reuters*

Dell to Acquire Perot Systems

Dell, which has struggled with flagging sales of personal computers and servers during the downturn, has bought itself a piece of the federal government's stimulus pie.

The company said last month that it would spend \$3.9 billion in cash to buy Perot Systems, a provider of technology services that is especially strong in the growing field of electronic health records. The government is pouring \$19 billion over the next five years into technology to help doctors and hospitals digitize medical records.

Dell and Perot were already working together on some medical projects. Perot serves 1,000 hospitals—more, it says, than any other services firm. *The New York Times*

Google Wins Partial Victory in E.U. Legal Battle Over Trademarks

Google may have won a partial victory in its long-running legal battle with trademark owners last month, when a senior judge at the European Court of Justice said the company didn't infringe anyone's trademark rights by allowing advertisers to buy search keywords corresponding to those trademarks.

Advocate General Póiaras Maduro added, however, that Google may be liable for running advertisements that offer trademark-infringing products in its AdWords advertising service.

Maduro was giving a nonbinding legal opinion, as is customary, ahead of a ruling by the court. The ruling is expected early next year. In nearly all such cases, the court follows the opinion of the advocate general. *IDG News Service*

French Parliament Approves "Three-Strikes" Antipiracy Law

The French National Assembly voted last month to adopt the so-called "three strikes" law criminalizing file-sharing. Those caught infringing copyrights online could face the suspension of their Internet access, a fine or even prison.

Three accusations of copyright infringement must be leveled at offenders before their Internet access is suspended. The law would create a new body—the High Authority for the Distribution of Works and the Protection of Rights on the Internet (nicknamed Hadopi)—tasked with receiving the accusations and sending out warnings, first by e-mail and then by registered mail.

IDG News Service

Microsoft Buys Software to Bolster Its ERP Product

Microsoft is buying technology from four of its partners in order to bolster its Dynamics AX enterprise resource planning product with functions commonly needed across various industries, according to a senior company executive.

Microsoft sells ERP products to five industries. Three of those categories—manufacturing, retail and professional services—will benefit from the purchase, said Crispin Read, general manager for Dynamics ERP. *IDG News Service*



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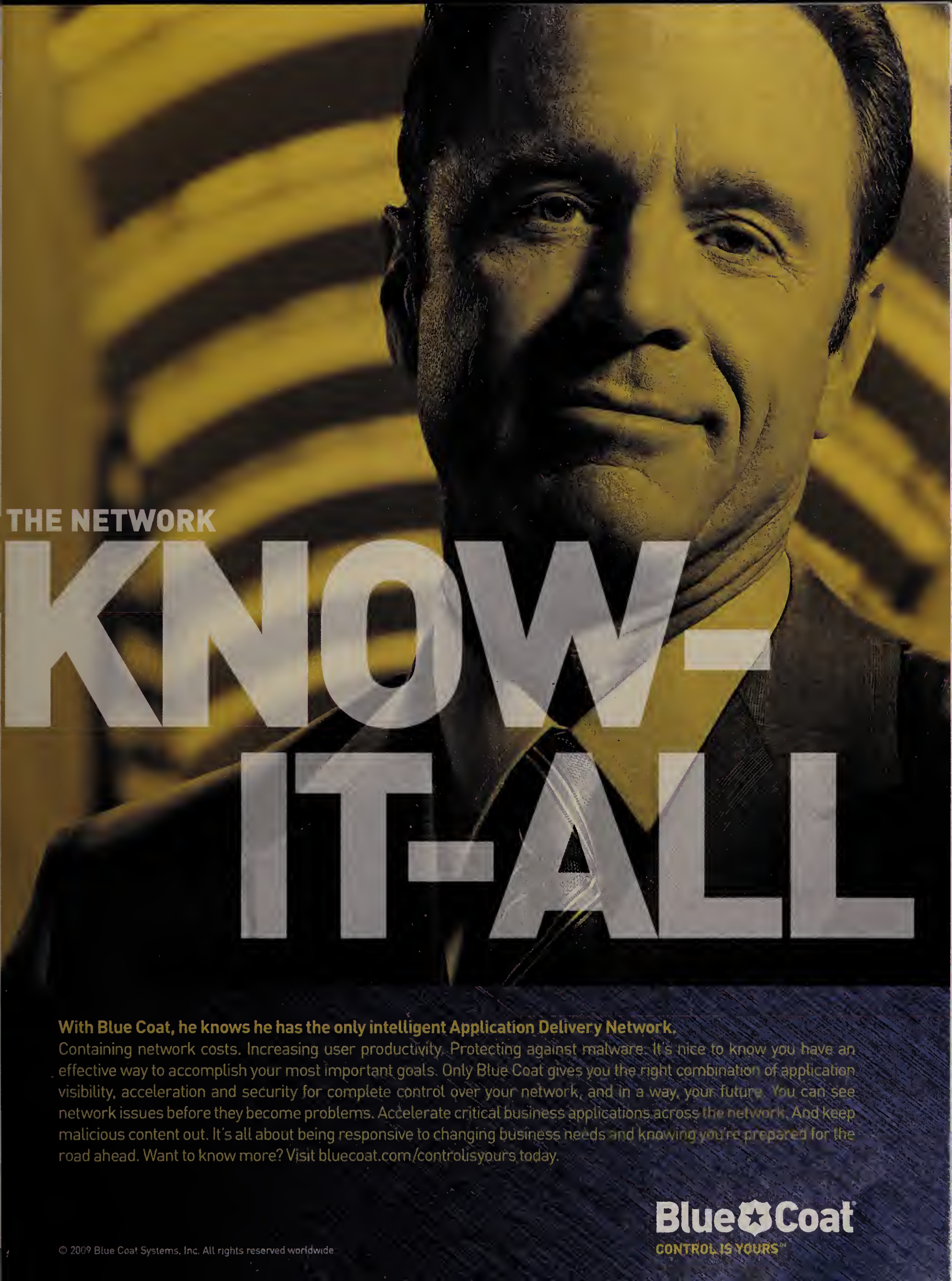


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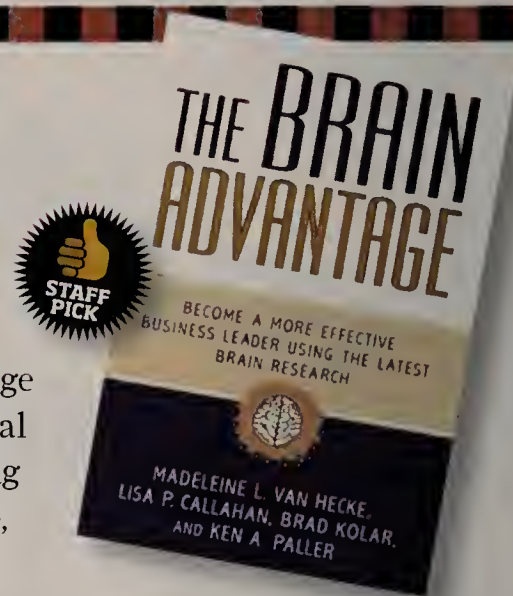
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The Brain Advantage

Become a More Effective Business Leader
Using the Latest Brain Research

By Madeleine L. Van Hecke, Lisa P. Callahan, Brad Kolar
and Ken A. Paller

Oliver Sachs fans, take note: Now you can read all about your strange brain and use the same book to become a better leader. Hecke, a clinical psychologist, and her coauthors discuss the pros and cons of working on auto-pilot, why your brain sometimes trusts the wrong people, when to go with your gut and more. *Prometheus Books, \$19, 2009*



Reinvent Your Enterprise

Through Better Knowledge Work

By Jack Bergstrand

BOOK Need to remake your organization? Coca-Cola veteran and management consultant Jack Bergstrand lays out a process for enhancing worker productivity, which management guru Peter Drucker once identified as the greatest challenge of the 21st century. Somewhat academic and low on anecdotes, this book is well organized and includes a compelling argument for compensation plans that allow knowledge workers to earn more than their managers. *BookSurge Publishing, \$18.99*

Beyond Blinking Lights and Acronyms

Mike Schaffner on Managing Information
Technology and Your IT Career

By Mike Schaffner

BLOG It happens all the time: You have standards that make absolute sense and then someone wants an exception. In a recent post on his personal blog, Mike Schaffner, head of IT for the valves and measurement group of oil and gas industry supplier Cameron International, has news for CIOs: Learn to live with exceptions. Or at the very least, explain your standards instead of simply pleading standards. In other entries, Schaffner discusses avoiding budget-induced IT death spirals, how to design technical support systems and responsible Tweeting.

mikeschaffner.typepad.com/michael_schaffner

The Accidental Successful CIO

By Jim Anderson

BLOG Here's a snappy blog with all the hot topics: innovation, Monday-morning quarterbacking on recent IT systems failures and why CIOs should start thinking of themselves as "strategic execution officers." In a recent post on storage, Anderson writes that CIOs don't need more storage, they need smart storage. "Reality has caught up with us and environmental costs coupled with possible legal issues have turned the world of storage upside down. Now CIOs need a new strategy to deal with their company's growing storage needs."

www.theaccidentalsuccessfulcio.com

Recession Won't Protect IT Organizations from Employee Turnover

By Diane Berry and Lily Mok, Gartner Analysts

RESEARCH It is true: People are less likely to quit when unemployment is so high. But some will quit, and you'd rather not lose some of those people. In this report, Gartner recommends that the IT department collect a lot more data on turnover, such as how it has changed the department's overall pool of core job functions, critical skills and demographic profile.

<http://bit.ly/34c5w>

Compiled by Joan Indiana Rigdon. Tell us what you're reading. Go to advice.cio.com/blogs/the_techie_reading_list or write to letters@cio.com.

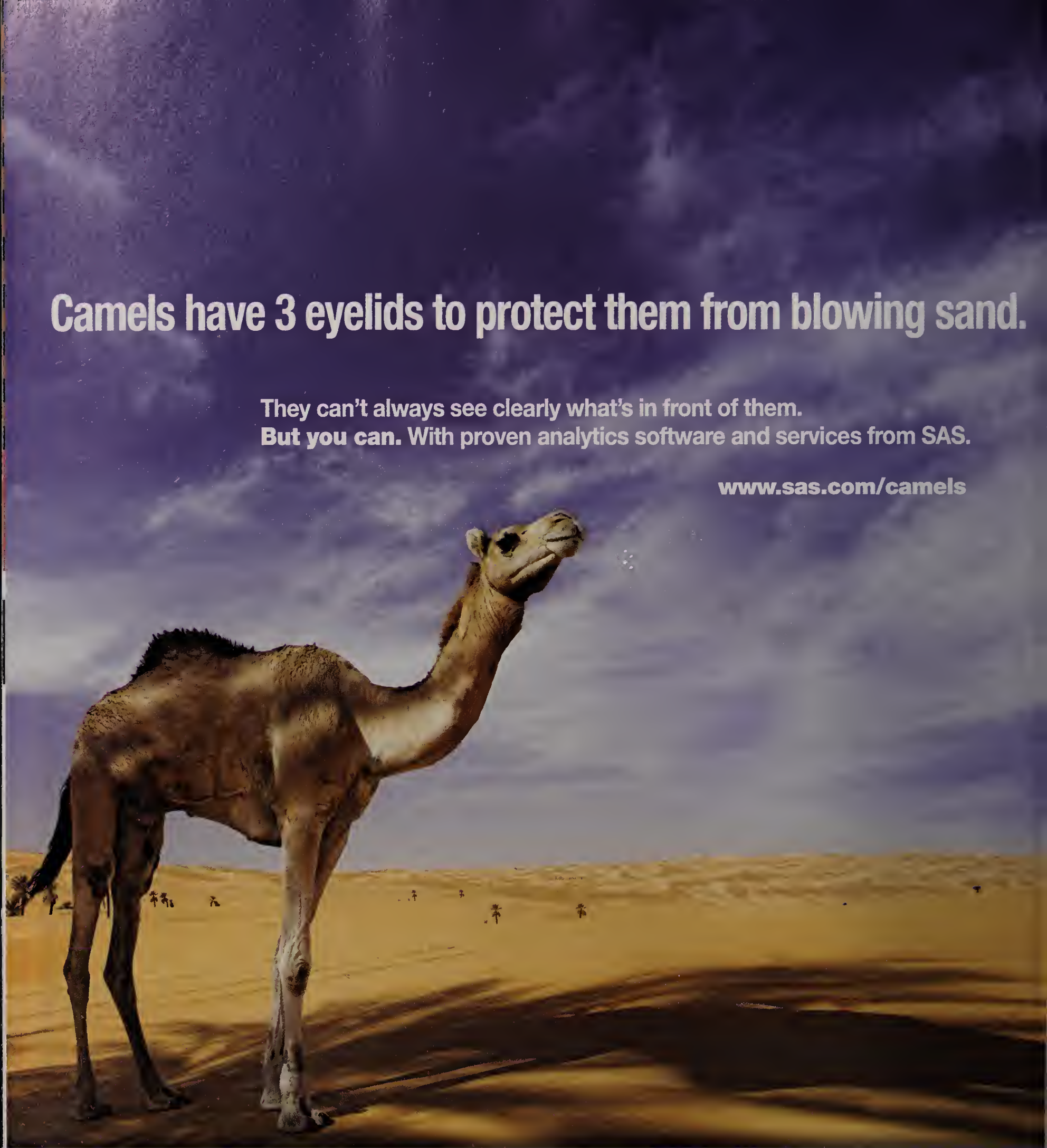
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15

Pennies from Heaven

Credit giant TransUnion makes the cloud pay **BY KIM S. NASH**

Many companies have braved cloud computing by moving low-risk applications such as e-mail to public clouds. But TransUnion, the \$1.2 billion credit reporting company, is taking a greater leap: offering revenue-generating applications to its customers as a cloud service.

For nearly a decade, TransUnion has built software for banks, retailers and other companies to check the credit histories of consumers. Now TransUnion wants to get out of the expensive, time-consuming software development business and sees cloud computing as the way, says Scott Metzger, CTO at TransUnion Interactive, the subsidiary that launched the new services in July. "This can be a tricky line of business to manage because we're not a consulting outfit. We're a financial services company," Metzger says.

The ability to ramp up new products—as well as expand or contract operational capability quickly—for less money reflects "the whole promise of cloud," says Tom Pettibone, founder and managing partner of Transition Partners, an IT management consulting firm. TransUnion, ►►►

PHOTO ILLUSTRATION BY ISTOCKPHOTO

..... **↑8%** Cell phone users since 2008 Pew Internet & American Life Project **47%** U.S. adults booking travel online Adology Research **47%** Corporate directors who think CEO pay is too high USC Marshall School of Business

Pettibone says, "is pushing the envelope."

No More Custom Development

The custom applications TransUnion built connected clients with proprietary consumer data so they could, for example, look up credit scores or verify identities. Offering such software helped TransUnion compete with Equifax and Experian.

Software development, of course, is people-intensive and can be slow, which cuts into the profits TransUnion can make on each project. Under the old regimen of developing a custom application, it could take weeks or months for TransUnion to build a new service. On top of that, sometimes TransUnion had a backlog of requests stretching three months or so, Metzger says.

So TransUnion decided to offer customers access to its data through APIs. Customers can now build their own applications and access consumer credit data via TransUnion's private cloud, that is, its internal bank of secured servers. When a customer asks for a capability, TransUnion can provide access to the appropriate APIs within a week.

TransUnion can offer the same services and consumer data as before, but opening APIs to customers costs less than doing custom development. Metzger declines to specify costs or profits. To help protect its data on consumers, TransUnion uses ServiceNet, an access management appliance from Sonos Systems, to control which customers can access which APIs based on profiles TransUnion and the customer create together. ServiceNet also lets TransUnion change its systems more easily. For example, previously, if TransUnion hired a new vendor to calculate sales taxes for its customers in various states, it would have had to tweak each of the custom applications to integrate with the new vendor. Now, TransUnion makes one change in the access management layer that ServiceNet manages.

Overall, TransUnion is happy to escape being an IT provider for its customers, Metzger says. "We can focus on providing the core intellectual property."

Contact Senior Editor Kim S. Nash at knosh@cio.com. Follow her on Twitter: www.twitter.com/knosh99.

Barriers to Green IT

Sustainability aims to lower costs, **but it's hard to show ROI**



Multiple responses allowed SOURCE: BT survey of 150 IT professionals

Social Networking Grows Up

While people in their teens and 20s were the first to adopt social networks, they aren't just for the younger crowd anymore, according to a Forrester Research report.

"Much of the growth in social networks today comes from people older than 34," writes analyst Sean Corcoran. More half of adults ages 35 to 44 belong to social networks. Seventy percent of adults 55 and older use "social tools" at least once a month.

The report categorizes people who use social networks as "creators" who write blogs, upload audio and video or post stories; "critics" who take part in online discussions; "collectors" who organize and rate content by using RSS feeds and sites like Digg; "joiners" who subscribe to social networks; and "spectators" who view user-generated content.

People in the 35 to 54 age group are increasingly joiners and creators, while adults over 55 are more likely to be spectators. With so many more adults participating in social networks, it makes sense for companies to create media and advertising campaigns targeted to them, Corcoran writes.

-Elizabeth Montalbano

.....↓**10%** Global trade in 2009 World Trade Organization↑**2.7%** Retail sales in August Department of Commerce**81%** Executives aiming to build their brand with social media Ethos Business Law

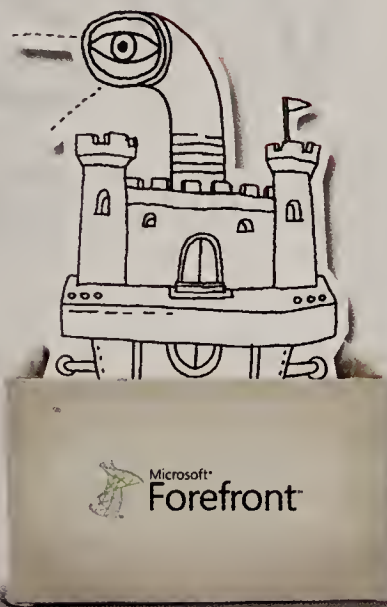
Yossi
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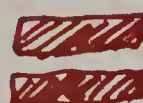
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U.S. Needs **More Broadband**

The United States IT industry is the most competitive in the world, but the lack of a broadband infrastructure and tightened immigration policies could threaten its lead, according to an annual study sponsored by the Business Software Alliance (BSA).

Finland, Sweden, Canada, the Netherlands, the United Kingdom, Australia, Denmark, Singapore and Norway round out the list of the 10 most competitive nations in the IT field.

Several factors helped the United States come out on top, including a large pool of qualified IT workers, a good research and development environment and a strong legal system, says Denis McCauley, director of global

technology research at the Economist Intelligence Unit, which conducted the study.

But the United States dropped from second to seventh place on comparisons of infrastructure because some parts of the country need better access to high-speed networks, the study concluded. BSA said that U.S. competitiveness could also be improved by easing immigration restrictions.

The study takes into account factors such as the supply of skilled workers, technology infrastructure, intellectual property protection and having a government that promotes technology as well as allows market forces to work.

Some measures could be improved

internationally, the study found. For example, in Asia, IT training would benefit from greater investment in business studies and language skills.

Meanwhile, governments in Europe and North America must work with companies to encourage more young people to choose mathematics and science-based subjects at universities.

Finland and the Netherlands made good progress, compared to last year's study. Finland's approach to R&D—the study's most important category—helped it move from number 13 to number two. An improved broadband infrastructure helped the Netherlands jump five places to the fifth spot.

—Mikael Ricknäs

**You want an authentication solution that's rock-solid.
Shouldn't you expect the same of the company behind it?**

THE **TOP LINE** INTERVIEW :: **Andrew McAfee**

Enterprise Evolution

The Harvard Business School associate professor, who coined the term Enterprise 2.0, says CIOs should learn to love the changes wrought by social software



Has Web 2.0 gained more acceptance?

I see all levels of engagement. One of the really heartening things is that this isn't just a phenomenon for high-tech companies or companies that employ tons of Gen-Y workers. It's happening at different kinds of companies, industries and sectors of the economy.

Twitter has been hot, and Facebook redesigned its site to stream information

in real-time. Do you see that kind of app design moving into enterprises?

There is this move from categorizing and foldering toward more free-flowing, streaming apps and lightweight tagging systems. To some extent, companies are having to let go of this idea of "official" sources of information or a few "approved" people who get to put information out there. All the people involved in your value chain are going

to vote with their feet. They are going to want to use technologies that make sense to them. If the IT department isn't providing them, they're going to use publicly available stuff on the Web. If the IT department shuts that stuff down, they'll complain, they'll be less effective and they'll leave the company.

Does the industry need to improve security?

Very little, if anything,

needs to be done. I ask for horror stories all the time, especially compliance or security-related horror stories; I just don't have tales about screw ups. The quick and dirty explanation for why that is: People know how to do their jobs. We know the stuff that will get us fired if we talk about it.

Andrew McAfee was interviewed by C.G. Lynch, a writer based in California. Read the complete interview at www.cio.com/article/495843.

NEW MARKETS Help for Going Global

Companies in pursuit of foreign markets boost demand for translation services



Who is doing it: eInstruction, a company that develops an interactive whiteboard and other products for schools, has had its software and documents translated into 47 languages in order to target global markets. Governments—which are frequent customers—often demand translations before purchase, says Susan Liberty, manager of eInstruction's technical communications group.

How it works: eInstruction hands over the documents it wants translated to MultiLing, a service company that analyzes the material using its translation memory tool. The tool identifies sentences that have been translated at an earlier time and automatically adds those translations to the new text. Workers at MultiLing also use a terminology tool that displays preferred terms, predetermined by the customers, for specified words. "The tool does not take the human translator out of the equation, but it helps the translator to be more efficient," says Emmanuel Margetic, director of marketing at MultiLing.

Growth potential: Economic woes spurred demand for MultiLing's services, Margetic says, as U.S. companies sought work in foreign markets. Research firm Common Sense Advisory says the top 30 translation companies grew nearly 20 percent in 2008. The firm expects the market for translation services to grow 10 percent annually, reaching \$22.5 billion by 2012.

—Nancy Gohring

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Rx for Hospital Rebuild

Step one: Engage stakeholders in an interactive board game to prioritize high-tech amenities **BY KRISTIN BURNHAM**

When Le Bonheur Children's Medical Center considered plans in 2004 to rebuild its outdated facility—originally constructed in 1952—a lot of executive thinking went into what “state of the art” would mean to the hospital's future.

No one thought a board game would figure into the game plan.

“We recognized that the facilities we had weren't capable of keeping up with our technology or our clinical care,” says Dave Rosenbaum, vice president of facilities management. The design needed to meet the needs of today's technology and an evolving IT landscape.

Working with Kathleen Healey-Collier, administrative director of clinical systems, informatics and technical services, Rosenbaum carved out an \$18 million budget—approximately 7 percent of the entire project's budget—from the general contract funds. This gave them the oppor- ▶▶▶



At Le Bonheur Children's Medical Center, **Kathleen Healey-Collier** and **Dave Rosenbaum** took an inclusive approach to planning the hospital's future IT capabilities.

tunity to consider technology choices separately from the construction of the building. The first step was selecting a technology design firm, which SSR Engineering and Johnson Controls won in a jointly awarded contract.

In one of their first meetings, Johnson Controls gave the Le Bonheur Children's team a board game to play called "The Solutions Navigator."

The interactive assessment tool—which, among other questions, quizzed players on their vision for the project and prioritized systems, applications and communication devices—was designed to help organizations identify and address infrastructure and technology needs.

Game pieces are placed on the board, which measures and compares an organization's needs, priorities and satisfaction levels. The result is an assessment of the hospital's top priorities and areas of improvement. Healy-Collier and Rosenbaum shared the game with patients, the patients' families and doctors, among others—each received a board to play.

Within a month, Johnson Controls collected and sorted the information gathered from the game, and presented the findings to the team. The information was sorted into three categories: must have, should have and optional. Some of the optional items could be added once construction was completed, if they had extra money. Many of the must-have and should-have

items were infrastructure-related: the local area network, PBX, structured cabling, building security and intercoms.

Healy-Collier and Rosenbaum also created a secondary chart for designing the patient rooms. Patients and their families listed the technologies they wanted under the three categories. They found that patients were all looking for reasonable amenities, "nothing too Star Trekky," she says. Families wanted to know who was taking care of their child and which tests were being ordered. Patients wanted their cell phones to work in the hospital.

Le Bonheur Children's worked in tandem with Johnson Controls to collect, refine and award the RFPs with various suppliers. That relationship was especially helpful and efficient, Healy-Collier says, in removing much of the "wheeling and dealing with the vendors."

While the selection and design process was easily managed, Healy-Collier says managing expectations was more challenging. "Being a state-of-the-art hospital means different things to people," she explains. "We've had to make sure that we're asking about everyone's expectations and communicating our intentions effectively."

Contact Associate Editor Kristin Burnham at kburnham@cio.com. Follow her on Twitter: www.twitter.com/kmburnham.

SOFTWARE-AS-A-SERVICE CONTRACTS

Things You Need to Know

By David F. Carr

1

THINK SERVICE. Vendors may "try to squeeze SaaS terms and conditions into a software contract," says Azzarello Group consultant Nick Goss. A CIO needs to address how this relationship is different. Both established vendors and startups have latched onto SaaS as an easy route to market because it simplifies distribution of code, says Goss. But beware of those who may be "more focused on accruing customers than assuring reliable levels of service," he warns.

2

GET GUARANTEES. Harrison Lewis, CIO at the grocery chain Haggen, negotiates application-specific protections. When Haggen signed with a SaaS human resources and payroll vendor, Lewis made the vendor guarantee to support the application for at least 10 years or pay a penalty. He also required software escrow, in case the vendor went out of business. "I'm looking to mitigate the risk, so what I put into the contract are the worst-case scenarios," Lewis says.

3

UNDERSTAND WHAT YOU ARE GIVING UP. Lewis notes he no longer has the option of sticking with an older version of the application. "Under SaaS, when the vendor goes to version 10, guess what? Here we go!" he says. So rather than controlling the schedule, he insists on getting adequate notice to address issues such as training.

4

WATCH OUT FOR ROGUE DEPLOYMENTS. One CIO Goss knows was embarrassed to find out his firm had adopted a SaaS application for a serious business function without his knowledge. "He only found out about it because someone commented that it wasn't performing very well," Goss says. At Haggen, the CFO wouldn't let such a contract be signed without Lewis's consent. "If it has any smell of technology, he brings it to me," he says.

5

RESISTANCE IS FUTILE. SaaS can be a good match for many business goals, so "a CIO trying to stand against this is going to be perceived as showing a remarkable lack of business judgment," Goss says. "You might as well work out a way for it to happen that makes it safe so it's not going to come back and bite you." By becoming an advocate for SaaS where it's appropriate, you can play a bigger role in selecting the right services and negotiating contracts to make them manageable.

LEGAL AFFAIRS

Capture the Red Flags

Tips to help you comply with new federal rules for spotting—and stopping—identity theft **BY MATTHEW KARLYN, AARON TANTLEFF AND NICK DYER**

On November 1, many companies will be required to comply with Federal Trade Commission regulations—commonly known as the Red Flag Rules—that are designed to reduce the risk of fraud through identity theft. Companies that don't comply may face financial penalties as well as civil lawsuits. To prepare, your company should ensure that its information security policy conforms with FTC requirements. Keep the following tips in mind:

Know your company's red flags. The FTC doesn't provide a definitive list of red flags—warning signs that personal data is vulnerable to theft. Your company has to develop its own, based on experience and on examples provided under the Fair and Accurate Credit Transactions Act. Possibilities include unusual patterns of activity or suspicious information entered into a credit application.

Have a plan of attack. Your company should have procedures to detect red flags during daily business operations as well as policies dictating how it will respond to suspicious activity. Your company's procedures should also include regular monitoring of accounts, closing accounts

with flagged activity and notifying, to the extent possible, the victims of suspected identity theft.

Get the board involved. If your company is developing an information security program for the first time, the FTC requires that it be approved by the board of directors or an appropriate board committee. The board may designate itself, a committee or senior management to oversee the program and approve future changes.

Insist on third-party compliance. Customers or vendors who access your company's data should have a written information security program that complies with the FTC rules and is as robust as your company's program. Some states, such as Nevada and Massachusetts, even demand it.

Stay up to date. The rules require that the information security program be reviewed regularly in order to ensure that your list of red flags stays current with evolving methods of identity theft.

Matthew Karlyn is senior counsel and Aaron Tantleff and Nick Dyer are associates with Foley & Lardner. Read an expanded version of this story at www.cio.com/article/503165.

CIOs' "New Voice" Says Innovate

CIOs are spending about 55 percent of their time driving innovative activities such as rolling out new technologies and business initiatives or managing nontechnology business issues, says a study by IBM called "The New Voice of the CIO" (www-304.ibm.com/businesscenter/cpe/html0/183234.html).

Data for the Global CIO Study 2009 was collected during face-to-face interviews conducted by IBM

execs with 2,598 CIOs, working in organizations across 78 countries.

When choosing from a list of 20 ways to increase competitive advantage within their industry, 83 percent of respondents identified business intelligence and data analytics as the most important factors in optimizing their businesses. Security and data reliability also ranked high as a common concern, with 71 percent of the CIOs planning more spending for compliance and risk management reasons.

Companies surveyed were grouped into high, medium and low growth levels by using profit data from 2004 to 2007. The top three themes common among successful

CIOs at high-growth companies were a sharper focus on innovation, business impact and strategies to raise the ROI of IT.

The findings also showed a significantly different focus for CIOs in each group. High-growth CIOs, for example, emphasize innovative change to the business while CIOs at low-growth firms focus more heavily on tactical IT management.

"As the business changes, IT can either respond as usual or challenge the traditional IT operating model at the core" says Dave Patzwald, VP of IT at Schneider Electric. "This is a transformational shift, not just a short-term challenge."

—Simone Levien



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COVER STORY :: **SECURITY**



WHY SECURITY MATTERS AGAIN

BY BILL BRENNER

Our seventh-annual Global Information Security survey finds IT leaders struggling to defend against new threats from social networking and cloud computing, but with renewed support from business leaders

Today's most compelling technologies are giving you the biggest security headaches. Social networking sites such as Twitter, Facebook and LinkedIn enhance collaboration and help your company connect with customers, but they also make it easier than ever for your employees to share customer data and company secrets with outsiders.

Virtualization and cloud computing let you simplify your physical IT infrastructure and cut overhead costs, but you've only just begun to see the security risks involved. Putting more of your infrastructure in the cloud has left you vulnerable to hackers who have redoubled efforts to launch denial-of-service attacks against the likes of Google, Yahoo and other Internet-based service providers. A massive Google outage earlier this year illustrates the kind of disruptions cloud-dependent businesses can suffer.

But there's also good news. Even though the worst economic recession in decades has compelled you to spend less on outsourced security services and do more in-house, your security budget is holding steady. And more of you are employing a chief security officer.

Such are the big takeaways from the seventh-annual Global Information Security survey, which *CIO* and *CSO* magazines conducted with PricewaterhouseCoopers earlier this year. Nearly 7,300 business and technology executives worldwide responded from a variety of industries, including government, health care, financial services and retail.

These trends are shaping your information security agenda. "Every company worries about protecting their data, especially their client data," says Charles Beard, CIO at Science Applications International Corp. (SAIC). "Under the old business model, everyone had to get together in the same building in the same geographical area. Now everyone is using the Internet and mobile devices to work with each other. That's where we see the promise of things like social networking. The flip side is we're exposed to the dark side of cyberspace. Adoption of this technology is well ahead of efforts to properly secure and govern it."

Read on to learn what we found.

Top IT Security Priorities

New investments are focused on protecting data, authenticating users

- Biometrics **1**
- Web content filters **2**
- Data leakage prevention **3**
- Disposable passwords/smart cards/tokens **4**
- Reduced or single-sign-on software **5**
- Voice-over-IP security **6**
- Web 2.0 security **7**
- Identity management **8**
- Encryption of removable media **9**



“Competitive advantage
lies in *blending both
manufacturing
and IT domain
expertise.*”

“The closer we get to
production
and the customer,
the more value
we add
to them.”

“Our *prosperity*
depends completely
on our *data.*”

“My *ambition*
is to make
*business
processes
faster
and
cheaper.*”

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A smarter business needs smarter thinking.
Let's build a smarter planet.

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TREND #1

The Promise and Peril of Social Networking

In less than two years, social networking has gone from an abstract curiosity to a way of life for many people. When someone updates their status on Twitter, Facebook or LinkedIn, they might do it at work by day or on company-owned laptops from home at night.

What gives IT executives heartburn is the ease with which users could share customer data or sensitive company activities while they're telling you what they're having for lunch. Cyberoutlaws know this and use social networks to launch phishing scams. In one popular attack, they send their victims messages that appear to be coming from a Facebook friend. The "friend" may send along a URL they insist you check out. It may be pitched as a news story about Michael Jackson's death or a list of stock tips. In reality, the link takes the victim to a shady website that automatically drops malware onto the computer.

The malware goes off in search of any valuable data stored on the computer or wider company network, be it customer credit card numbers or the secret recipe for a new cancer-fighting drug.

It's no surprise, then, that every IT leader surveyed admitted they fear social-engineering-based attacks. Forty-five percent specifically fear the phishing schemes against Web 2.0 applications.

Nevertheless, for many company executives, blocking social networking is out of the question because of its potential business benefits. Companies now clamor to get their messages out through these sites, so the challenge for CIOs is to find the right balance between security and usability.

"People are still incredibly naïve about how much they should share with others, and we have to do a better job educating them about what is and isn't appropriate to share," says H.

Frank Cervone, vice chancellor of information services with Purdue University Calumet. "We have to do a better job of enhancing our understanding of what internal organization information should not be shared." (For a different view, read "Enterprise Evolution," an interview with Harvard Business School Associate Professor Andrew McAfee, Page 20.)

But in a university setting, it's critical to engage people through social media, Cervone adds. Even in the commercial sector, he doesn't see how organizations can avoid it.

And yet this year—the first in which we asked respondents about social media, only 23 percent said their security efforts now include provisions to defend Web 2.0 technologies and control

what can be posted on social networking sites.

One positive sign: Every year, more companies dedicate staff to monitoring how employees use online assets—57 percent this year compared to 50 percent last year and 40 percent in 2006. Thirty-six percent of respondents monitor what employees are posting to external blogs and social networking sites.

To prevent sensitive information from escaping, 65 percent of companies use Web content filters to keep data behind the firewall, and 62 percent make sure they are using the most secure version of whichever browser they choose. Forty percent said that when they evaluate security products, support and compatibility for Web 2.0 is essential.

Unfortunately, social networking insecurity isn't something one can fix with just technology, says Mark Lobel, a partner in the security practice at PricewaterhouseCoopers.

"The problems are cultural, not technological. How do you educate people to use these sites intelligently?" he asks. "Historically, security people have come up from the tech path, not the sociologist path. So we have a long way to go in finding the right security balance."

Guy Pace, security administrator with the Washington State Board for Community and Technical Colleges, says his organization takes many of the precautions described above. But he agrees with Lobel that the true battleground is one of office culture, not technology. "The most effective mitigation here is user education and creative, effective security awareness programs," he says.

TREND #2

Jumping into the Cloud, Sans Parachute

Given the expense to maintain a physical IT infrastructure, the thought of replacing server rooms and haphazardly configured appliances with cloud services is simply too hard for many companies to resist. But rushing into the cloud without a security strategy is a recipe for risk.

According to the survey, 43 percent of respondents are using cloud services such as software as a service or infrastructure as a service. Even more are investing in the virtualization technology that helps to enable cloud computing. Sixty-seven percent of respondents say they now use server, storage and other forms of IT asset virtualization. Among them, 48 percent actually believe their information security has improved, while 42 percent say their security is at about the same level. Only 10 percent say virtualization has created more security holes.

Security may well have improved for some, but experts like Chris Hoff, director of cloud and virtualization solutions at Cisco Systems, believe that both consumers and providers need to ensure they understand the risks associated with the technical, operational and organizational changes these technologies bring to bear.

"When you look at how people think of virtualization and what it means, the definition of virtualization is either very narrow—that it's about server consolidation, virtualizing your applications and operating systems, and consolidating every-

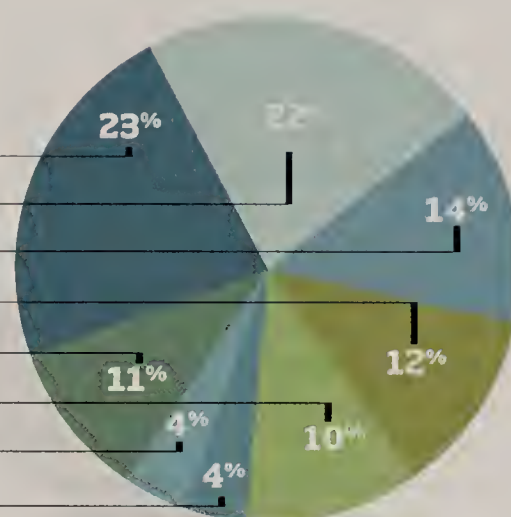
23%
Companies
that have
policies for
using Web 2.0
technologies
and social
networking
sites

Dark Cloud

Fears about vendors dominate cloud security risks

What is the greatest security risk to your cloud computing strategy?

Ability to enforce provider security policies
Inadequate training and IT auditing
Access control at provider site
Ability to recover data
Ability to audit provider
Proximity of company data to someone else's
Continued existence of provider
Provider regulatory compliance



thing down to fewer physical boxes—or it's about any number of other elements: client-side desktops, storage, networks, security," he says. "Then you add to the confusion with the concept of cloud computing, which is being pushed by Microsoft and a number of smaller, emerging companies. You're left scratching your head wondering what this means to you as a company. How does it impact your infrastructure?"

Fortunately, there's some evidence of companies proceeding with caution. One example is Atmos Energy, which is using Salesforce.com to speed its response time to customers and help the marketing department manage a growing pool of clients, according to CIO Rich Gius.

The endeavor is successful thus far, so Gius is investigating the viability of running company e-mail in the cloud. "It would help us address the growing challenge where e-mail-enabled mobile devices like BlackBerrys are proliferating widely among the workforce," he says. But he's not ready to take such a big step because the risks, including security, remain hard to pin down. One example of the disruption that cloud-dependent companies can experience came in May, when search giant Google—whose content accounts for 5 percent of all Internet traffic—suffered a massive outage. When it went down, many companies that have come to rely on its cloud-based business applications (such as e-mail) were dead in the water.

The outage wasn't caused by hackers, but there are signs that cybercriminals are exploring ways to exploit the cloud for malicious purposes. On the heels of the outage, attackers added insult to injury by flooding Google search results with malicious links, prompting the U.S. Computer Emergency Response Team (U.S. CERT) to issue a warning about potential dangers to cloud-based service sites.

The attack poisoned several thousand legitimate websites by exploiting known flaws in Adobe software to install a malicious program on victims' machines, U.S. CERT says. The program would then steal FTP login credentials from victims and use the information to spread itself further. It also hijacked the victim's browser, replacing Google search results with links chosen by the attackers. Although the victimized sites were not specifically those offering cloud-based services, similar schemes could be directed at cloud services providers.

IT organizations often make an attacker's job easier by configuring physical and cloud-based IT assets so poorly that easy-to-find-and-exploit flaws are left behind. Asked about the

potential vulnerabilities in their virtualized environments, 36 percent cited misconfiguration and poor implementation, and 51 percent cited a lack of adequately trained IT staff (whose lack of knowledge leads to configuration glitches). In fact, 22 percent of respondents cited inadequate training, along with insufficient auditing (to uncover vulnerabilities) to be the greatest security risk to their company's cloud computing strategy.

It's this awareness that makes Atmos Energy's Gius proceed with caution. "We have no CSO. If we were a financial services firm it might be a different story, or if we had a huge head count," Gius says. "But we are a small-to-medium-sized company, and the staff limitations make these kinds of implementations more difficult."

Even with the right resources, security in the cloud is a matter of managing a variety of risks across multiple platforms. There's no single cloud. Rather, "there are many clouds, they're not federated, they don't natively interoperate at the application layer and they're all mostly proprietary in their platform and operation," Hoff says. "The notion that we're all running out to put our content and apps in some common [and secure] repository on someone else's infrastructure is unrealistic."

Lobel, with PricewaterhouseCoopers, says perfect security is not possible. "You have to actively focus on the security controls while you are leaping to these services," he says. It's difficult for companies to turn back once they have let their data and applications loose because they are often quick to rid themselves of the hardware and skills they would need to bring the services back in-house.

"If you dive down a well without a rope, you may find the water you wanted, but you're not going to get out of the well without the rope," he says. "What if you have a breach and you need to leave the cloud? Can you get out if you have to?"

TREND #3

Insourcing Security Management

A few years ago, technology analysts were predicting unlimited growth for managed security service providers (MSSPs). Many companies then viewed security as a foreign concept, but laws such as Sarbanes-Oxley, the Health Insurance Portability and Accountability Act and the Gramm-Leach-Bliley Act (affecting financial services) were forcing them to address intrusion defense, patch

management, encryption and log management.

Convinced they couldn't do it on their own, companies chose outsourcers to do it for them. Gartner estimated the MSSP market in North America alone would reach \$900 million in 2004 and that it would grow another 18 percent by 2008.

Then came the economic tsunami, which appears to have cast a shadow over outsourcing plans even though security budgets are holding steady. Although 31 percent of respondents this year are relying on outsiders to help them manage day-to-day security functions, only 18 percent said they plan to make security outsourcing a priority in the next 12 months.

When it comes to specific functions, the shift has already begun. Last year, 30 percent of respondents said they were outsourcing management of application firewalls, compared to 16 percent today. Respondents cited similar reductions in outsourcing of network and end-user firewalls. Companies have also cut back on outsourcing encryption management and patch management.

At the same time, more companies are spending money on these and other security functions. Sixty-nine percent said they're budgeting for application firewalls, up slightly compared to the past two years. Meanwhile, more than half of respondents said they are investing in encryption for laptops and other computing devices.

The results surprise Lobel of PricewaterhouseCoopers. "When you think about it logically, some IT organizations have the resources and maturity to manage their operating systems and patches, but many don't," he observes. "Hopefully, the numbers simply mean IT shops have grown more mature in their security understanding."

Gius of Atmos Energy offered another possible explanation: Companies see a lot of chaos in the security market with an avalanche of mergers and acquisitions. One independent security vendor after another has merged with or been acquired by other companies. Examples include BT's acquisition of Counterpane and IBM's acquisition of Internet Security Systems. IT leaders are simply getting out of the way until the industry settles down.

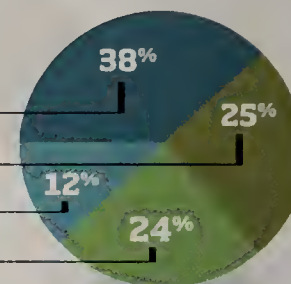
Gius says Atmos Energy is handling most of its security in-house right now. "We pursued a number of open-source

Security Budgets Hold Steady

More companies are increasing spending than cutting it

Direction of spending

Increase
Stay the same
Decrease
Don't know



Numbers may not add to 100% due to rounding

and lower-cost solutions to manage it ourselves," he says. "We invested in two people to help ensure we had the skills to manage that environment." But he'd like to outsource more if it makes sense financially. He notes that security is increasingly integrated into the platforms provided by the likes of Microsoft, Cisco and Oracle, as well as telecom providers like Comcast and Verizon. It makes sense to him to have those providers manage the security of their systems.

Beard, with SAIC, says that no matter what drives security spending decisions, companies should understand their specific security strategies and where managed security providers can offer unique value. Smart business executives understand that they must maintain control of the big picture at all times, even if a third party is managing many of the levers. Keeping an eye on security service providers and the risks they are encountering is essential. "CIOs and security officers may outsource certain functions to various degrees, but they should never outsource their responsibility," Beard advises.

TREND # 4

A New Corporate Commitment

CIOs may still struggle with the quality of their data security, but the response to this year's survey suggests their executive peers have agreed, finally, that security can't be ignored.

Companies' budget plans tell part of the story. Not only are more companies investing in security technologies, but overall security investments are largely intact, despite the economy.

Twelve percent of respondents expect their security spending to decline in the next 12 months. But 63 percent say their budgets will hold steady or increase (although fewer foresee increases than did last year).

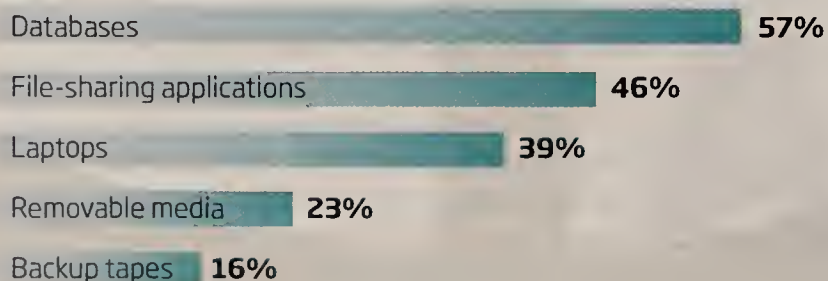
For starters, more companies are hiring CSOs or chief information security officers (CISOs). Eighty-five percent of respondents said their companies now have a security executive, up from 56 percent last year and 43 percent in 2006. Just under one-third of security chiefs report to CIOs, 35 percent to CEOs and 28 percent to boards of directors.

Two factors are influencing companies to maintain security

Data Dangers

Attacks on data have increased faster than any other security exploit. The top target: **databases**.

How attackers get your data



Multiple responses allowed

Survey Shows Cloud-Based Email Management Can Answer Cost, Compliance and Growth Concerns

Email's importance triggers new worries over security, accessibility

What started out as a convenient communications tool has blossomed far beyond anyone's expectations. Email has evolved to become an important repository of information, one that must be managed, secure, and accessible. In July 2009, IDG Research surveyed IT and business executives on the state of email management within their companies, and more than 80% of them said email downtime would cause either a "high" or "critical" impact on productivity; it was graded roughly the same as losing access to databases or transactional systems.

But with the evolution of email comes surging costs—both hard (e.g., IT resources and storage) and soft (e.g., maintaining compliance and business continuity). Only half of the companies surveyed feel that their current email management solutions are highly effective in solving these challenges. To address this, companies are considering the viability of outsourcing email management entirely.

Email Challenges Facing Executives

The realization about costs is driving efforts to harness the email management conundrum. More than 70 percent of respondents report that their IT organizations have been asked to find more cost-effective ways to manage email. Over half have established a deadline: within the next 12 months.

But cost isn't the only challenge the survey respondents face:

- 42%—whether because of mergers, acquisitions, or other decisions—struggle with multiple, overlapping email management technologies
- 44% worry about the effectiveness of their current email management solution for disaster recovery
- 42% worry about its effectiveness for business continuity
- 38% worry about its effectiveness when it comes to enabling compliance with federal, state, or industry regulations

Solving the Problem

Unfortunately, many executives are still unaware of the options available to solve the problem. The survey asked respondents about their inclination toward using a cloud-based hosted solution for email management and the results indicated a strong surge in outsourcing. While only about 12 percent of respondents are already doing so, 38 percent said they are likely to pursue a cloud-based solution (34 percent said that they are likely to implement it in the next 12 months).

This subgroup expects a number of cost- and efficiency-related benefits from using a hosted solution for email storage, including:

- Lowered burden on physical resources (61%)
- Lowered burden on IT staff (54%)
- Scalability (53%)
- Quick access for eDiscovery (22%)

Even more important, cloud-based hosted email management solutions—such as those offered by Iron Mountain—can accommodate the concerns of executives in multiple business areas, including: finance (by exchanging capital expenses for operating expenses); legal (by facilitating eDiscovery searches and production); compliance (by improving risk management); records management (by ensuring proper retention of email records); operations (by increasing overall efficiency); and information technology (by lowering administrative burden).

Hosted cloud-based email management solutions can quell many of the concerns revealed by the survey. They offer consistent operational expenses while helping to maintain productivity and protect business continuity.

For further results and insight into this IDG Research Services survey, visit www.cio.com/whitepapers/email and download the free white paper "The Shifting State of Email Management".



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as a corporate priority: Seventy-six percent say the increased risk environment has elevated the importance of cybersecurity among the top brass, while 77 percent said the increasingly tangled web of regulations and industry standards has added to the sense of urgency.

Respondents were asked how important various security strategies had become in the context of harsher economic realities. Seventy percent cited the growing importance of data protection while 68 percent cited the need to strengthen the company's governance, risk and compliance programs.

pitch (instead of the CIO) and delegating responsibility among lower-level IT security administrators and engineers.

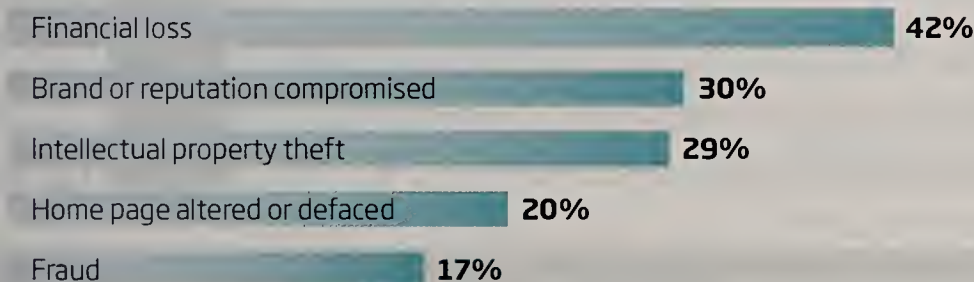
None of these developments, however, make a focus on information security a sure bet in the eyes of IT leaders. Just because companies feel they have to spend money on security doesn't mean executives view it as an essential, even beneficial business process instead of a pain-in-the-neck task being forced upon them.

Angée said CIOs and security leaders still have to fight hard for every penny. Meanwhile, security execs don't have the same decision-making power as other

How Cybercrime Costs You

Losses from incidents average \$833,000

The business impact of security breaches



Multiple responses allowed

Notes Mauricio Angée, senior manager of IT security and compliance and CSO at Universal Orlando: "For segregation of duty purposes, it's interesting to see how companies are being asked—by compliance auditors, qualified security assessors and through legislation—to hire IT security managers with a much-more-defined set of roles and responsibilities." Such roles include setting the company's security policy, making the security budget

C-level leaders in every company, says PricewaterhouseCoopers' Lobel. CIOs can bring in a CSO or CISO without a strategy and budget for that person to work with and end up achieving nothing. If something goes wrong, he concludes, "all you'll have is somebody to blame and fire." **CIO**

Bill Brenner is a senior editor with CSO magazine and CSOonline.com. Follow him on Twitter: www.twitter.com/BillBrenner70.

How We Got the Numbers

The seventh-annual "Global State of Information Security" survey—a worldwide study by CIO, CSO and PricewaterhouseCoopers—was conducted online from April 20, 2009, through June 23, 2009. CIO and CSO print and online customers and clients of PricewaterhouseCoopers from around the globe were invited to take the survey. Results are based on responses from 7,276 security and information technology professionals from more than 100 countries. Thirty-two percent of respondents were from North America, followed by Asia (27 percent), Europe (26 percent), South America (14 percent) and the Middle East and South Africa (2 percent). The margin of error for this survey is +/- 1 percent.

—Carolyn Johnson, research manager



MODERN TECH TALK

with Jim Malone

Server Advantage

IT needs to consider refreshing existing infrastructure with servers that deliver more performance, scalability, and more efficiency. With the debut of the Intel Xeon processor 5500 series earlier this year, that server refresh will deliver exponential benefits. Faster, more efficient processing, energy conservation, and an integrated path to virtualization are some of the constellation of benefits CIOs can expect from a server upgrade based on Intel Xeon processor 5500 series.

Explains Intel's Eric Doyle:



"Think of it this way: If you have 4-year old servers you can get up to a 9 to 1 server consolidation ratio. What that means is you're getting 90 percent lower operating

cost because not only are the 5500 series-based servers high performance, they're much more energy efficient and you are using a lot fewer of them. We can show you how to get an eight month payback on your investment."

Intel's own IT department is known for walking the walk. "It may seem funny that although our success is based on driving sales of processors, we're out showing people how you can buy fewer systems, and still get the same, if not more, work done. But we're very proud to go out and share our best known methods, what has worked for Intel, we're more than willing to share those ideas with anyone who wants to listen."

Add in a virtualization initiative, and Doyle says the benefits only get better.

"Virtualization is hugely important, not only from a consolidation perspective, but from ease of administration, flexibility, being able to change things on the fly, failover, it really is the wave of the future.

"We have virtualization technology built into not only the processor, but the chipsets and the network interfaces. Things for security, things for speed, we've got them all built in to not just the processor, but the chipsets and the network interface."

Doyle says now's the time to invest. "When the recession ends, do you want to be the person that has been sitting on your wallet, not investing in IT and being, could be 12, 16 months behind your competition?"

"I'm very comfortable in saying about the Xeon 5500, it's more than evolution, it is revolutionary in the way that it performs what it delivers to the IT professional."

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Today's IT Leaders on Market Trends

Achieving Value from GRC Initiatives

CIOs can't wait for better times to build a strong framework for managing Governance, Risk and Compliance (GRC) requirements. It's an always-on priority.

Business Service Management provides IT organizations with the technology to **simplify, standardize and automate processes** to meet compliance requirements and reduce risk.

About CIO2CIO:

This peer-based thought leadership program analyzes quantitative research and tests it via qualitative interviews with actual CIOs. The resulting executive insight is then disseminated via IDG's multimedia assets. To learn more about the CIO2CIO program, please contact charles_lee@idg.com.

FOR MANY ORGANIZATIONS IT HAS ALSO BEEN A COSTLY ONE. The amount of man-hours and money currently spent on manual control processes and audits isn't sustainable—neither in today's difficult environment nor over the long term.

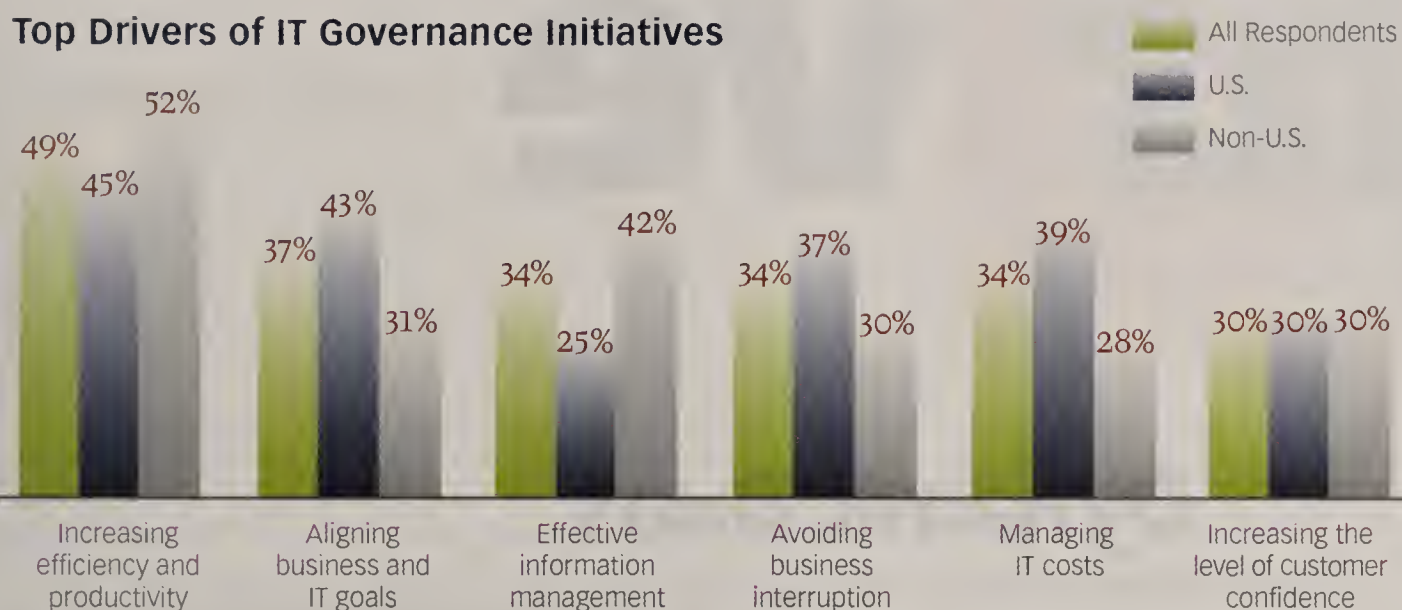
IDG Research Services' "IT Governance, Risk and Compliance" survey points to the extra labor and cost burdens created when IT organizations lack a systematic, automated approach to managing GRC. Among the survey's findings:

- More than half of the 200 IT and business management respondents worldwide report that the amount of time spent on IT GRC issues has increased compared to one year ago.
- Among IT managers, nearly 60 percent say that GRC issues affect staff time spent on changes and administrative tasks. Half of them state that IT is constantly reacting to problems, and almost as many cite that the cost of operations rises as a result of these issues.
- More than 15 percent of companies' 2009 budgets are allocated to IT governance, risk and compliance efforts.

But IT leaders are concerned about more than just the day-to-day routine expenses. Potential revenue loss due to deficiencies in addressing risk—and the possible missed opportunities to leverage process excellence to increase business value—weigh on their minds as well.

Clearly, a comprehensive GRC foundation must be a critical part of overall IT plans. To ensure corporate integrity, sustainability and profitability, organizations must be able to manage, track and automate GRC processes and activities in a streamlined, coordinated and continuous way. That's a struggle for more than one-third of all respondents to the IDG survey, who said they found it difficult to define a governance, risk and compliance strategy. Without such a strategy—and the tools to make actionable the policies it dictates in a repeatable and consistent way—it's likely that the majority of IT labor time will be consumed on piecemeal, manual tasks. In addition, the complexities of the technology environment will lead to additional process inefficiencies, jeopardizing continuous compliance and risk reduction.

Top Drivers of IT Governance Initiatives



GRC Is a High Priority

GRC is an important priority for seven out of ten respondents. When asked about the business benefits of resolving GRC issues, 84 percent of respondents cited fewer business service interruptions and 82 percent cited the ability to quickly launch new business initiatives. IT and business benefits to be realized from resolving these issues range from improved data quality to tighter IT security controls.

To gain these advantages, organizations must aggressively tackle some key components of a sound GRC plan.

Top Requirements for GRC Success

Businesses worldwide recognize that IT process automation, along with IT process integration and enterprise security software, are critical or very important to GRC efforts, with survey respondents ranking them as their top three requirements for success. More than half see the importance of IT process automation increasing in the next 12 to 24 months, and **nearly two-thirds state that configuration management, visibility and control, as well as asset and software license management, are either critical or very important to current GRC initiatives.**

Given the importance of automation and integration to GRC efforts, it's not surprising to see respondents adopting best-practice frameworks that emphasize such capabilities. Just under half are using the IT Infrastructure Library® (ITIL), but that figure rises to nearly 75 percent when those who plan to implement it are included. Close to 65 percent of respondents report they currently are close or plan to implement COBIT (Control Objectives for Information Related Technology). Together these frameworks address increasing regulations, legislation and requirements by helping IT departments to stabilize IT operations and put in place the internal control systems to deliver against business needs. Effectively implementing best-practice frameworks, however, requires software to codify, automate, integrate and report on the processes that facilitate GRC management

activities as part of daily IT workflows. Such software can also lower compliance costs and improve service quality.

As companies move to use best-practice frameworks to translate IT actions into clear and auditable business terms, they may want to consider teaming IT and business leaders together to set IT GRC strategies.

Realize the GRC Vision

Business Service Management (BSM) from BMC can help guide companies to create and document processes and build out GRC capabilities in a methodical way—all the while defining and managing expectations set between IT and the business.

The BSM platform provides IT organizations with the technology to simplify, standardize and automate processes to meet internal and external compliance requirements and reduce risk. BSM enables GRC capabilities in the context of the portfolio of services most relevant to the business. IT delivers value in the short term, while building out the pieces of a comprehensive and coordinated strategy for managing, tracking and automating the processes and activities necessary for meeting multiple compliance requirements over the long haul.

Technology alone won't solve all of the GRC issues companies face. BSM technology, however, plays a significant role in implementing the resulting GRC strategy, automating key GRC processes, and ultimately enabling IT to focus its agenda and investments on the proactive and strategic projects that will help the business succeed.

Go to www.cio.com/whitepapers/bmc to obtain a free download of the white paper "Driving Value from GRC Initiatives." Based on a major research survey by IDG Research Services, this paper draws on peer insights to help CIOs implement a strategy to maximize the value of GRC initiatives.

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Dynamic Duos

Kick the lonely CIO habit. New research suggests partnerships are the career boost we need. **BY STEPHANIE OVERBY**

Let's face it: As CIO, you're lonely. You've got teams of people working below you, a boss and board weighing in from above and executive peers who don't get what you do. What you need is a partner.

Not the kind of partner that's become a C-suite cliché—"We're partnering with a new vendor" or "We have to partner with the business"—but a real honest-to-goodness collaboration between you and another human being reaching common goals you could never achieve individually.

"Isolation is quite literally unhealthy—as bad for you as smoking or lack of exercise," explains Rodd Wagner who, with fellow Gallup executive Gale Muller, coauthored the book *Power of 2: How to Make the Most of Your Partnerships at Work and in Life*. "The more we collaborate, the more we accomplish." In fact, Wagner and Muller, who studied thousands of one-on-one collaborations to determine what makes them successful, found that the highest levels of happiness and engagement kick in ▶▶▶



ILLUSTRATION BY EVA TATCHEVA

when a person has five to 10 good alliances.

Raytheon vice president and CIO Rebecca Rhoads credits some of her success to alliances formed with peers in engineering, finance, supply chain, communications, HR, business development and legal. "They often give me new insights," she says.

Potential partners can be found among your direct reports or in the C-Suite Wagner says. The problem is you can't just throw any two people together and expect a fruitful relationship to flourish. To create more perfect unions, Wagner and Muller lay-out eight requirements: complementary strengths, a common mission, fairness, trust, acceptance, forgiveness, communicating and unselfishness. That means the assistant that doesn't exactly share the workload may not be partner material. And that VP who sees you as his main competition? Not a partner.

Also avoid partnering with your corporate doppelganger. "You don't need another person just like you as a partner," Muller explains. "You need someone who has what you don't."

Savvy IT executives should foster solid partnerships among their staff, too. Employees with one collaborative relationship are 29 percent more likely to say they'll stay with their company for the next year and 42 percent more likely to say they'll intend to stick it out for their careers, according to Gallup research. Wagner and Muller also discovered that workers who are well-partnered generate higher customer satisfaction scores, safety, retention, creativity, productivity and profitability for their companies.

If it seems your reports are competing rather than collaborating, take a closer look at your incentives. "There is a pervasive bias for shining the spotlight on one person. You can see it in how the press wanted to know whether Edmund Hillary or Tenzing Norgay stepped first on the summit of Everest," says Muller.

Although serious violations of trust are rare, even the best relationships can go astray. "There are crucial moments when one of the partners has to make a leap of faith," says Muller. "This often means forgiving an error or being willing to give more. Partnerships need to be fair, but fair doesn't mean equal."

If all this sounds like foreign territory, that's because it is. Corporate history may contain examples of successful partnerships—Disney's Michael Eisner and Frank Wells, Bill Hewlett and Dave Packard—but business books tend to focus on how to be a great leader, not a great better-half. "We have a culture that emphasizes being the all-around hero, even though research is quite clear that each of us is a mixture of strengths and weaknesses. It's a real blind spot in business strategy," says Wagner. To forge good partnerships, "you have to recognize both that you need help and that you are also the help someone else needs."

Stephanie Overby is a freelance writer living in Massachusetts.

three-minute coach



Help!

How can I assess a potential employer's office space to determine whether its corporate culture suits me?

ELAINE VARELAS is managing partner at Keystone Partners and has over 20 years experience in career-development consulting.

Always: Identify the culture where you thrive, and pursue that culture. Do you excel in more formal hierarchical organizations or informal, loosely organized structures? And remember, when leadership changes, the culture changes, too.

Often, the address of a company will tell you all you need to know about the company culture. If they are located in the business district of a city rather than a funkier part of town, there is a good chance the office is more likely to be business professional than business casual, for instance. What is happening at the front desk? Is the receptionist working with equipment that is part of current communications technology plan or an obsolete phone system? If it's outdated, that may be an indication of where investments in technology fall as a business priority.

Sometimes: Ask current employees to describe the culture. If there are differences between what former employees have said, ask about that, and identify why. Take note of private office space. Are cubes or offices used? Are there many private conferences rooms being used? Also notice whether office doors are open or closed. This is a good indication of the how well the company collaborates on projects. And note the technology each person has. Are they limited, or part of each person's repertoire of tools to work more effectively?

Never: Don't compare one company to another and don't disparage other companies. Don't be threatening, judgmental or hasty in your assessments. If you find things lacking or not up to par, remember that those short comings may provide tremendous professional opportunities if you take a position with the company.



Let Your Hands Do the Talking

Your gestures, expressions and body language all speak volumes. But are you really listening? **BY MARYFRAN JOHNSON**

Before you even open your mouth, you've spoken volumes. That's the reality of our interaction with other people, whether we're facing a crowded conference hall, an executive boardroom meeting or an audience of one.

Remember Sting's '80s-era hit "Every Breath You Take"? That catchy, creepy song about watching "every move you make" could be the theme song for any audience you face. On an instinctive, largely unconscious level, people are reading your gestures and watching your face for clues about what's going to happen next.

Communications coach Nick Morgan calls this the "second conversation"—the silent communication that pulses outward from our posture, gestures, facial expressions and overall body language while we're speaking. The primal impact of that second conversation is why making eye contact matters so much, and why you should open your hands outward toward people to inspire their trust.

While most of us know better than to stand in front of any audience with arms crossed defensively over our chests, many executives "are surprisingly oblivious in day-to-day work of what their body language is saying," says Morgan, author of *Trust Me: Four Steps to Authenticity and Charisma*. "Most of my [coaching] work is about creating the discipline to monitor yourself and others in room."

Spoken words and gestures are inextricably linked, he notes, but it's only in the past decade of brain research that our understanding changed about how communication

happens between human beings. "We actually express things physically before we talk," Morgan explains. "What the brain research shows is that the two conversations should be reversed. The 'gesture' conversation happens first."

Fran Dramis can believe that.

"I'm an Italian. I have to speak with my hands," says the extroverted former CIO of Bell South, who's given talks to audiences as large as 10,000. Now CEO of F. Dramis, a business strategy consultancy in Atlanta, he always abandons the podium to stalk around the stage, making eye contact with several individuals and then returning to them periodically to visually check in. Are they nodding and smiling still? Or losing interest?

"I've always believed that if you don't get a feeling out of an audience, they will remember nothing of your talk. Zero!" Dramis says. "Inspiring that feeling is what enables them to understand your

content, to remember what you said."

So how can you turn this subtle "second conversation" to your advantage? If you don't have the resources to work with a professional speech coach, try videotaping yourself while rehearsing your talk, Morgan recommends. Connecting with others is all about "posture and nearness," he adds, so stand up straight, move toward your audience and let your gestures do the talking. They will anyway.

Maryfran Johnson is CIO magazine's editor in chief. Reach her at mfrjohnson@cio.com.

**Executives
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is saying."**

—Communications coach Nick Morgan



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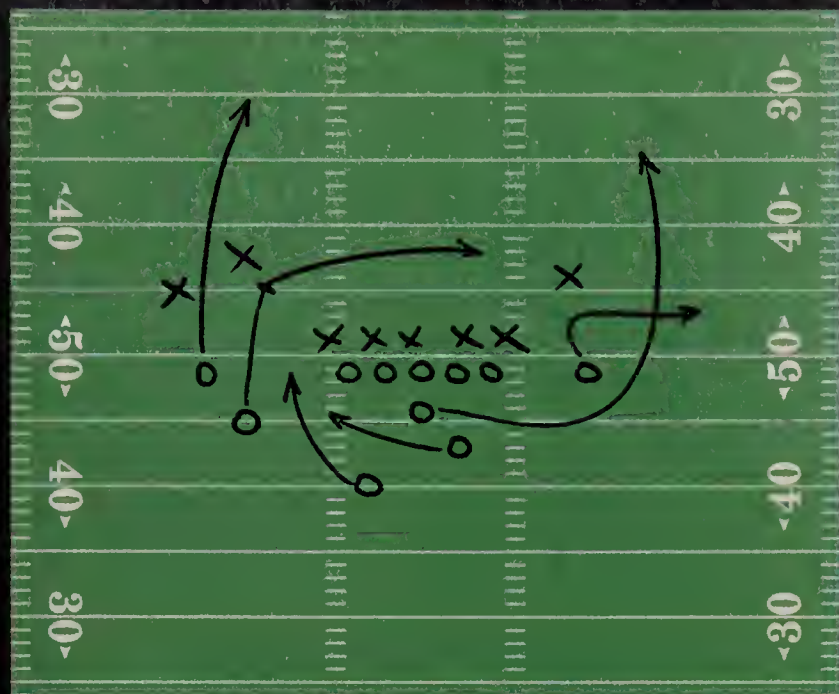
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Cruise Control

Seattle drivers can find out about traffic not only when they're in it but also on the Department of Transportation's Traveler's Information Map—an interactive website tracking real-time traffic patterns along many of the city's arterial roads. Before the site's March launch, static online maps of area freeways were the only resource for city drivers.

There are 70 road cameras represented on the map: Displayed in a mouse-over is a current image of each roadway. Detectors on the roads log information on speed, volume and road occupancy, which is converted into color-coded congestion patterns for the map. The site also shows registered incidents and planned events that may cause heavier traffic. Even with less overall traffic due to the recession, Seattle CTO Bill Schrier, says the site is quite popular with drivers, noting more than 7.1 million page views since its launch. Coming up next: a mobile version for iPhones.

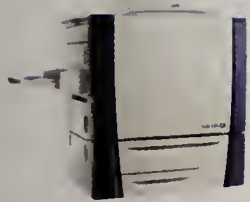
—Simone Levien

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